

Claims

- 1.- A tiled emissive display (500) for displaying an image, the tiled emissive display (500) comprising a plurality of emissive display tile assemblies (100) mechanically coupled together, and a processing means for performing real-time calculations with respect to the image to be displayed,
 wherein the processing means is a distributed processing means distributed over the plurality of emissive display tile assemblies (100), so that each emissive display tile assembly (100) is suitable for handling a different portion of the image for performing real-time calculations.
- 2.- A tiled emissive display (500) according to claim 1, wherein the distributed processing means is suitable for performing image upscaling or downscaling at each emissive display tile assembly (100).
- 3.- A tiled emissive display (500) according to claim 2, wherein for the image upscaling or downscaling a high-level scaling algorithm is used.
- 4.- A tiled emissive display (500) according to claim 3, wherein the high-level scaling algorithm is a 100% accurate scaling algorithm.
- 5.- A tiled emissive display (500) according to claim 1, wherein the distributed processing means of the plurality of emissive display tile assemblies (100) operate in parallel.
- 6.- A tiled emissive display (500) according to claim 1, wherein an emissive display tile assembly (100) is provided with a data input and/or a data output connection for receiving data from or transmitting data to another emissive display tile assembly (100) via any of a multi-line connection, a daisy chain connection or a star connection.
- 7.- A tiled emissive display (500) according to claim 1, wherein an emissive display tile assembly (100) is provided with a power input and/or a power output connection for receiving power from or transmitting power to another emissive display tile assembly (100) via any of a multi-line connection, a daisy chain connection or a star connection.

- 8.- A tiled emissive display (500) according to claim 1, wherein an emissive display tile assembly (100) is provided with a connector allowing to combine both power and data transmission.
- 5 9.- A tiled emissive display (500) according to claim 1, wherein each emissive display tile assembly (100) is provided with a local memory means for storing configuration data.
- 10.- A tiled emissive display (500) according to claim 1, wherein an emissive display tile assembly (100) is adapted so that it can be repaired while the other tiles continue working.
- 10 11.- A tiled emissive display (500) according to claim 1, wherein the tiled emissive display (500) has an adjustable size.
- 12.- A method (800) of automatically configuring a tiled emissive display (500) comprising a plurality of emissive display tile assemblies (100) mechanically coupled together, the tiled emissive display (500) being intended for displaying an image, the method comprising
- 15 assigning (812) to each emissive display tile assembly (100) a unique address for use in steering content and communication data,
- distributing (814) to each emissive display tile assembly (100) display co-ordinates that designate which portion of the image to be displayed it will show,
- 20 configuring (816) the emissive display tile assemblies (100) by reading, for each emissive display tile assembly (100), configuration data stored in a memory device (624) local to the emissive display tile assembly (100), and using this information in a distributed processing means (610) local to the emissive display tile assembly (100) to configure the resolution of the emissive display tile assembly (100).
- 25 13.- A method according to claim 12, furthermore comprising, before assigning (812) to each emissive display tile assembly (100) a unique address, detecting the presence of the emissive display tile assemblies (100) in the tiled emissive display (500).
- 14.- A method according to claim 12, furthermore comprising calibrating the emissive display tile assemblies (100) to match overall display
- 30 brightness and/or to correct individual pixel non-uniformity.

- 15.- A method according to claim 12, furthermore comprising, before assigning (812) to each emissive display tile assembly (100) a unique address, mechanically assembling and activating the tiled emissive display (500).
- 5 16.- A method according to claim 15, wherein the mechanical assembling includes providing one of each of a daisy chain connection, a multi-line connection or a star connection for data and/or power from one emissive display tile assembly (100) to another.
- 10 17.- A method of replacing at least one emissive display tile assembly (100) in a tiled emissive display (500) intended for displaying an image, the method comprising:
mechanically replacing (910) at least one emissive display tile assembly (100) in the tiled emissive display (500),
assigning (916) to the at least one replaced emissive display tile assembly (100) a unique address for use in steering content and communication data,
assigning (918) to the at least one replaced emissive display tile assembly (100)
15 display co-ordinates that designate which portion of the image to be displayed it will show,
configuring (920) the at least one replaced emissive display tile assembly (100) by reading, for each replaced emissive display tile assembly (100), configuration data stored in a memory device (624) local to the at least one emissive display tile assembly (100), and using this information in a distributed processing means (610)
20 local to the replaced emissive display tile assembly (100) to configure the resolution of the emissive display tile assembly (100).
- 25 18.- A method according to claim 17, furthermore comprising calibrating the at least one replaced emissive display tile assembly (100) to match overall display brightness and/or to correct individual pixel non-uniformity.
- 19.- A method according to claim 17, furthermore comprising, before assigning the unique address, determining (914) whether the number or arrangement of tiles has been altered.
- 30 20.- A method according to claim 19, furthermore comprising, if the number or arrangement of the tiles has been altered, configuring the tiled emissive display

(500) according to any of the methods according to claims 12 to 16.

- 21.- A method according to claim 17, wherein mechanically replacing at least one emissive display tile assembly (100) includes restoring a distribution connection for data and/or power from or to at least one other emissive display tile assembly (100).
- 5 22.- A tiled emissive display according to claim 1, wherein the display is an OLED display.
- 23.- A method according to any of claims 12 or 17, wherein the emissive display is an OLED display.